

**COOPERATION AGREEMENT**  
**BETWEEN THE**  
**NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY**  
**AND THE**  
**UNIVERSIDAD POLITÉCNICA DE VALENCIA**  
**FOR COOPERATION**  
**IN THE FIELDS OF**  
**HIGH-FREQUENCY ELECTRICAL MEASUREMENTS OF DIELECTRIC MATERIALS**

Prof. Juan Juliá Igual, Rector of the Universidad Politécnica de Valencia (hereinafter referred to as UPV), acting on behalf of this institution with headquarters located in Valencia, Camino de Vera s/n. and

Dr. James Olthoff, Acting Director of the Electronics and Electrical Engineering Laboratory of National Institute of Standards and Technology (hereinafter referred to as NIST), acting on behalf of this organization with headquarters in Gaithersburg (Maryland-USA)

**AGREE**

to strengthen their relations, to join efforts and to promote research co-operation activities according to the following

**ARTICLES**

**Article 1. Scope and Objectives**

This Cooperation Agreement, hereinafter referred to as "Agreement", establishes research cooperation between the Electronics and Electrical Engineering Laboratory of NIST and the UPV; hereinafter collectively referred to as "the Parties".

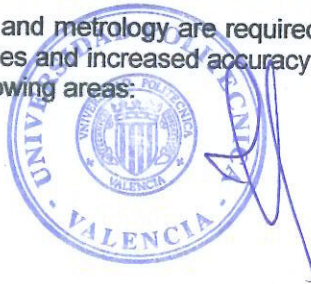
This Agreement is a statement of intent to facilitate the exchange of scientific and technical information and data between the Parties. This Agreement is not intended to be legally binding upon the parties.

**Article 2. Authority**

This Agreement is entered into by NIST pursuant to Title 15 United States Code Sections 272 and 273, and by UPV pursuant to Organic Law 4/2007, of April 12<sup>th</sup> 2007, and Decree 253/2003, of December 19<sup>th</sup> 2003.

**Article 3. Areas and Forms of Cooperation**

**A. Areas of Cooperation.** New measurement techniques and metrology are required for determining electrical properties of dielectric materials at higher frequencies and increased accuracy. To address this critical need, the collaboration is intended to focus on the following areas:



1. Modal analysis of dielectric test fixtures
2. Improved calibration techniques
3. One-port and two-port resonant frequency and quality factor measurements
4. Complex permittivity measurement intercomparison

**B. Forms of Cooperation.** Forms of cooperation may include the following:

1. Assignments of guest scientists to each other's laboratories for periods to be agreed upon by the Parties, as permitted under existing laboratory policies and programs;
2. Participate in seminars, workshops, and training courses in each other's laboratories;
3. Cooperative research and consultation on projects carried out partially in each institution;
4. Management and execution of joint activities;
5. Publication in peer-reviewed journal articles, which are co-authored by staff from NIST and UPV;
6. Other activities as may be agreed.

Each cooperation project pursued within the framework of this Agreement will be described in a Specific Implementing Agreement that should contain, among other aspects, the following:

- a) Definition of the objectives of the Project.
- b) Description of a work plan, including the different steps to follow and the development stages.
- c) Total budget, material and human resources required by the Project, and amount to be invested by each organisation.
- d) Guidelines for the co-ordination, execution and follow-up of the Project.
- e) Names of the persons, one on behalf of each organisation, jointly appointed as being responsible for the Project.

#### **Article 4. Financial Obligations**

Neither party intends to obligate funds under this Cooperation Agreement. Each party is responsible for its own expenses. Activities will be pursued subject to the availability of funds.

#### **Article 5. Planning and Review of Activities**

- A. The Director of the Office of International and Academic Affairs at NIST and the Director of CTT for UPV shall be the administrative points of contact.
- B. The point of contact for implementation of activities shall be Dr. Michael Janezic, for NIST and Prof. Felipe Peñaranda-Foix, Professor for UPV.
- C. The Parties may enter into separate project specific implementing agreements as necessary to fulfil the purposes of this Agreement.

#### **Article 6. Intellectual Property**

**A. Background Inventions.** No rights to Background Inventions are conveyed by this Agreement.

**B. Copyrights.** Pursuant to Section 105 of Title 17 of the United States Code, data prepared by NIST employees, and Data prepared jointly by NIST employees and Collaborator employees, are not subject to copyright in the United States. This Agreement does not otherwise affect the ability of either party to obtain Copyright in their respective works or jointly created works.



**C. Publication.** The Participants are encouraged to make publicly available the results of their research.

**D. Agreement Inventions.** Ownership and licensing rights to inventions created under this Agreement, if any, should be determined at the time the invention is made and in accordance with laws, regulations and treaties applicable to the owning Participants. Inventions created solely by employees of one party shall be owned by that party. Inventions jointly created by employees of both parties shall be jointly owned by the parties.

**E. Patent Applications.** Each Participant may file patent applications on their respective sole inventions. The parties should coordinate filing of patent applications on jointly owned inventions.

**F. Licensing.** The Participants should coordinate the commercial licensing of jointly owned inventions.

**G. Equipment.** Capital goods used during a common research project will remain property of the owning party. Ownership of equipment acquired or built within the framework of a common project will be determined, for each particular case, in the corresponding implementing agreement.

#### **Article 7. Duration and Termination**

This agreement is effective from the date of full execution for a period of five (5) years, unless terminated earlier by either Participant. Either Party may terminate this Agreement upon written notice to the other Party. This Agreement may be amended or extended by written agreement of the Participants.

#### **Article 8. Entire Agreement**

This Cooperation constitutes the entire agreement between the Parties concerning the subject matter hereof.

#### **Article 9. Non-Binding**

This Agreement is a statement of intent and is not legally binding upon the Parties. This Agreement shall not be the basis for a legal cause of action. This Agreement shall not create legally enforceable rights and cannot be the basis of any legal claim between the Parties to this Agreement.

#### **Article 10. Modification and resolution**

The parties will have the authority to modify or terminate this agreement at any given time and by mutual consent. Any of the parties involved will be able to terminate this agreement by means of a written communication to the other party and with six months notice. In both cases, the activities of the Specific Agreements in operation at the time should be completed.

#### **Article 11. Resolution of Disagreements**

NIST and the UPV agree to reach an amicable resolution to any disputes that may arise during the execution of this agreement.

#### **Article 12. Contact Information**

##### **Administrative Contacts**

##### NIST

Claire Saundry, Director  
Office of International and Academic Affairs at NIST



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UPV

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**Implementing Contacts**

NIST

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UPV

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And pursuant to the aforementioned information, both parties sign this document in English in duplicate in the place and on the date specified below.

ON BEHALF OF THE UNIVERSIDAD  
POLITÉCNICA DE VALENCIA



Prof. Juan Juliá Igual, Rector

Date: \_\_\_\_\_

ON BEHALF OF NATIONAL INSTITUTE OF  
STANDARDS AND TECHNOLOGY

Dr. James Olthoff, EEEL Acting Director

Date: 10/21/08